			Job Outlook ¹		
Community College	Program Name	Occupation Description ²	-	Average Number of Job Openings per Year	Median Hourly Wage 2005 ³
Kellogg	Industrial Instrumentation and Process	Precision Instrument and Equipment Repairers, All Other All precision instrument and equipment repairers not listed separately. Illustrative Examples: Laboratory Equipment Installer; Gyro Mechanic; Meteorological Equipment Repairer	814	28	\$25.84
	Industrial Robotics	Electromechanical Equipment Assemblers Assemble or modify electromechanical equipment or devices, such as servomechanisms, gyros, dynamometers, magnetic drums, tape drives, brakes, control linkage, actuators, and appliances. Illustrative Examples: Appliance Assembler; Vending Machine Assembler	2887	66	\$12.41
	Industrial Electricity/Electronics	First-Line Supervisors/Managers of Construction Trades and Extraction Workers (Quarry Boss) Directly supervise and coordinate activities of construction or extraction workers. These workers have other employees reporting directly to them. Illustrative Example: Cement Contractor	18966	352	\$27.26
		Electricians Install, maintain, and repair electrical wiring, equipment, and fixtures. Ensure that work is in accordance with relevant codes. May install or service street lights, intercom systems, or electrical control systems. Exclude "Security and Fire Alarm Systems Installers" (49-2098). Illustrative Examples: Electrical Sign Servicer; House Wirer; Chief Electrician	24018	445	\$28.13

	HelpersElectricians Help electricians by performing duties of lesser skill. Duties include using, supplying or holding materials or tools, and cleaning work area and equipment. Exclude apprentice workers and report them with the appropriate skilled construction trade occupation (47-2011 through 47-2221). Exclude construction laborers who do not primarily assist electricians, and classify them under "Construction Laborers" (47-2061). Illustrative Examples: Utilities Ground Worker; Electrician's Assistant	2155	89	\$14.00
	Security and Fire Alarm Systems Installers Install, program, maintain, and repair security and fire alarm wiring and equipment. Ensure that work is in accordance with relevant codes. Exclude "Electricians" (47-2111) who do a broad range of electrical wiring. Illustrative Examples: Fire Alarm Installer; Burglar Alarm Mechanic	1102	39	\$18.33
	Signal and Track Switch Repairers Install, inspect, test, maintain, or repair electric gate crossings, signals, signal equipment, track switches, section lines, or intercommunications systems within a railroad system. Illustrative Examples: Signal Mechanic; Signal Maintainer; Third Rail Installer	501	18 N/A	
ndustrial Pipefitting	Plumbers, Pipefitters, and Steamfitters Assemble, install, alter, and repair pipelines or pipe systems that carry water, steam, air, or other liquids or gases. May install heating and cooling equipment and mechanical control systems. Illustrative Examples: Gas Line Installer; Hot Water Heater Installer; Sprinkling System Installer	752	21	\$17.23
ndustrial Heating, Ventilation, Air	Heating, Air Conditioning, and Refrigeration Mechanics and Installers Install or repair heating, central air conditioning, or refrigeration systems, including oil burners, hot-air furnaces, and heating stoves. Illustrative Examples: Furnace Converter; Gas Furnace Installer; Oil Burner Repairer	8248	158	\$21.23

Industrial Millwright and Maintenance	Elevator Installers and Repairers (Escalator Installer) Assemble, install, repair, or maintain electric or hydraulic freight or passenger elevators, escalators, or dumbwaiters. Illustrative Examples: Elevator Mechanic; Hydraulic Elevator Constructor	939	25	\$29.48
	Industrial Machinery Mechanics Repair, install, adjust, or maintain industrial production and processing machinery or refinery and pipeline distribution systems. Exclude "Millwrights" (49 9044), "Mobile Heavy Equipment Mechanics, Except Engines" (49-3042), and "Maintenance Workers, Machinery" (49-9043) who perform only routine tasks. Illustrative Examples: Conveyor Belt Installer; Turbine Mechanic; Hydroelectric Machinery Mechanic	8958	164	\$23.64
	Maintenance Workers, Machinery (Belt Repairer) Lubricate machinery, change parts, or perform other routine machinery maintenance. Exclude "Maintenance and Repair Workers, General" (49-9042). Illustrative Examples: Grease Packer; Machine Oiler	3604	83	\$19.24
	Millwrights Install, dismantle, or move machinery and heavy equipment according to layout plans, blueprints, or other drawings. Illustrative Examples: Machine Erector; Machine Rigger; Machinery Dismantler	6232	144	\$28.72
	Refractory Materials Repairers, Except Brickmasons Build or repair furnaces, kilns, cupolas, boilers, converters, ladles, soaking pits, ovens, etc., using refractory materials. Illustrative Examples: Bondactor Machine Operator; Kiln Door Repairer	126	3	\$21.76

HelpersInstallation, Maintenance, and Repair Workers Help installation, maintenance, and repair workers in maintenance, parts replacement, and repair of vehicles, industrial machinery, and electrical and electronic equipment. Perform duties, such as furnishing tools, materials, and supplies to other workers; cleaning work area, machines, and tools; and holding materials or tools for other workers. Illustrative Examples: Mechanic's Helper; Diver's Helper; Blacksmith's Helper	3561	151	\$11.65
Engine and Other Machine Assemblers (Motor Installer) Construct, assemble, or rebuild machines, such as engines, turbines, and similar equipment used in such industries as construction, extraction, textiles, and paper manufacturing. Illustrative Examples: Machine Builder; Turbine Assembler	5992	163 N	N/A
Textile Cutting Machine Setters, Operators, and Tenders Set up, operate, or tend machines that cut textiles. Illustrative Examples: Canvas Cutter; Rag Shredder; Welt Trimming Machine Operator	249	6	\$12.24
Textile Knitting and Weaving Machine Setters, Operators, and Tenders (Loom Changer) Set up, operate, or tend machines that knit, loop, weave, or draw in textiles. Exclude "Sewing Machine Operators" (51-6031). Illustrative Examples: Crochet Machine Operator; Ribbing Machine Operator; Looping Machine Operator	131	2	\$10.77
Textile Winding, Twisting, and Drawing Out Machine Setters, Operators, and Tenders (Slubber Machine Operator) Set up, operate, or tend machines that wind or twist textiles; or draw out and combine sliver, such as wool, hemp, or synthetic fibers. Include slubber machine and drawing frame operators. Illustrative Examples: Beamer Operator; Bobbin Doffer; Frame Tender	118	2	\$16.08

Avionics Technician	Avionics Technicians Install, inspect, test, adjust, or repair avionics equipment, such as radar, radio, navigation, and missile control systems in aircraft or space vehicles. Illustrative Examples: Aircraft Electrician; Automatic Pilot Mechanic; Missile Facilities Repairer	216	5	\$22.61
	Aircraft Structure, Surfaces, Rigging, and Systems Assemblers Assemble, fit, fasten, and install parts of airplanes, space vehicles, or missiles, such as tails, wings, fuselage, bulkheads, stabilizers, landing gear, rigging and control equipment, or heating and ventilating systems. Illustrative Examples: Aircraft Riveter; Fuselage Framer; Skin Installer	202	7	\$14.91
Industrial Machine Tool	Extruding and Drawing Machine Setters, Operators, and Tenders, Metal and Plastic Set up, operate, or tend machines to extrude or draw thermoplastic or metal materials into tubes, rods, hoses, wire, bars, or structural shapes. Illustrative Examples: Draw Bench Operator; Tube Drawer; Wire Drawing Setter	6482	219	\$12.68
	Forging Machine Setters, Operators, and Tenders, Metal and Plastic Set up, operate, or tend forging machines to taper, shape, or form metal or plastic parts. Illustrative Examples: Cold Header Operator; Swager Operator; Drop Hammer Operator	3196	46	\$14.82
	Rolling Machine Setters, Operators, and Tenders, Metal and Plastic Set up, operate, or tend machines to roll steel or plastic forming bends, beads, knurls, rolls, or plate or to flatten, temper, or reduce gauge of material. Illustrative Examples: Forming Roll Operator; Rolling Mill Operator; Tubing Machine Operator	1954	43	\$15.00

Cutting, Punching, and Press Machine Setters, Operators, and Tenders, Metal and Plastic Set up, operate, or tend machines to saw, cut, shear, slit, punch, crimp, notch, bend, or straighten metal or plastic material. Illustrative Examples: Perforator Operator; Crimping Machine Operator; Four Slide Machine Setter	20335	450	\$13.57
Drilling and Boring Machine Tool Setters, Operators, and Tenders, Metal and Plastic Set up, operate, or tend drilling machines to drill, bore, ream, mill, or countersink metal or plastic work pieces. Illustrative Examples: Drill Press Operator; Jewel Cupping Machine Operator; Reaming Press Operator	4280	108	\$14.49
Grinding, Lapping, Polishing, and Buffing Machine Tool Setters, Operators, and Tenders, Metal and Plastic Set up, operate, or tend grinding and related tools that remove excess material or burrs from surfaces, sharpen edges or corners, or buff, hone, or polish metal or plastic work pieces. Illustrative Examples: Barrel Polisher; Jewel Bearing Facer; Metal Filer	8541	155	\$16.85
Lathe and Turning Machine Tool Setters, Operators, and Tenders, Metal and Plastic Set up, operate, or tend lathe and turning machines to turn, bore, thread, form, or face metal or plastic materials, such as wire, rod, or bar stock. Illustrative Examples: Gear Cutter; Screw Machine Operator; Threading Machine Setter	5941	108	\$18.97
Milling and Planing Machine Setters, Operators, and Tenders, Metal and Plastic Set up, operate, or tend milling or planing machines to mill, plane, shape, groove, or profile metal or plastic work pieces. Illustrative Examples: Broaching Machine Operator; Profiler Operator; Scribing Machine Operator	1789	28	\$16.35

Machinists Set up and operate a variety of machine tools to produce precision parts and instruments. Include precision instrument makers who fabricate, modify, or repair mechanical instruments. May also fabricate and modify parts to make or repair machine tools or maintain industrial machines, applying knowledge of mechanics, shop mathematics, metal properties, layout, and machining procedures. Illustrative Examples: Electrical Instrument Maker; Machine Fitter	28022	622	\$18.95
Multiple Machine Tool Setters, Operators, and Tenders, Metal and Plastic Set up, operate, or tend more than one type of cutting or forming machine tool or robot. Illustrative Examples: Machine Tool Operator; Combination Machine Tool Setter; Metal and Plastic Transfer Machine Operator	8174	222	\$20.88
Heat Treating Equipment Setters, Operators, and Tenders, Metal and Plastic Set up, operate, or tend heating equipment, such as heat-treating furnaces, flame-hardening machines, induction machines, soaking pits, or vacuum equipment to temper, harden, anneal, or heat-treat metal or plastic objects. Illustrative Examples: Metal & Plastic Annealer; Metal & Plastic Temperer; Induction Machine Setter	2209	89	\$14.94
Lay-Out Workers, Metal and Plastic Lay out reference points and dimensions on metal or plastic stock or workpieces, such as sheets, plates, tubes, structural shapes, castings, or machine parts, for further processing. Include shipfitters. Illustrative Example: Location and Measurement Technician	350	5	\$25.94
Metal Workers and Plastic Workers, All Other All metalworkers and plastic workers not listed separately. Illustrative Examples: Balancing Machine Operator; Film Casting Operator; Nail Making Machine Setter	9404	213	\$24.31

Industrial Sheet Metal	Sheet Metal Workers (Duct Installer, Metal) Fabricate, assemble, install, and repair sheet metal products and equipment, such as ducts, control boxes, drainpipes, and furnace casings. Work may involve any of the following: setting up and operating fabricating machines to cut, bend, and straighten sheet metal; shaping metal over anvils, blocks, or forms using hammer; operating soldering and welding equipment to join sheet metal parts; inspecting, assembling, and smoothing seams and joints of burred surfaces. Include sheet metal duct installers who install prefabricated sheet metal ducts used for heating, air conditioning, or other purposes. Illustrative Example: Tinsmith	6007	142	\$22.65
	Rolling Machine Setters, Operators, and Tenders, Metal and Plastic Set up, operate, or tend machines to roll steel or plastic forming bends, beads, knurls, rolls, or plate or to flatten, temper, or reduce gauge of material. Illustrative Examples: Forming Roll Operator; Rolling Mill Operator; Tubing Machine Operator	1954	43	\$15.00
	Cutting, Punching, and Press Machine Setters, Operators, and Tenders, Metal and Plastic Set up, operate, or tend machines to saw, cut, shear, slit, punch, crimp, notch, bend, or straighten metal or plastic material. Illustrative Examples: Perforator Operator; Crimping Machine Operator; Four Slide Machine Setter	20335	450	\$13.57
	Model Makers, Metal and Plastic Set up and operate machines, such as lathes, milling and engraving machines, and jig borers to make working models of metal or plastic objects. Include template makers. Illustrative Examples: Jig and Fixture Builder; Mandrel Maker; Mock Up Maker	1939	64	N/A

	Patternmakers, Metal and Plastic Lay out, machine, fit, and assemble castings and parts to metal or plastic foundry patterns, core boxes, or match plates. Illustrative Examples: Pattern Fitter; Stencil Cutter	1005	33	\$24.37
Industrial Welding	Welders, Cutters, Solderers, and Brazers Use hand-welding, flame-cutting, hand soldering, or brazing equipment to weld or join metal components or to fill holes, indentations, or seams of fabricated metal products. Illustrative Examples: Acetylene Burner; Arc Welder; Blow Torch Operator	14746	406	\$17.16
	Welding, Soldering, and Brazing Machine Setters, Operators, and Tenders (Laser Cutter Machine Operator) Set up, operate, or tend welding, soldering, or brazing machines or robots that weld, braze, solder, or heat treat metal products, components, or assemblies. Include workers who operate laser cutters or laser-beam machines. Illustrative Examples: Electron Beam Welder Setter; Laser-Beam Machine Operator; Ultrasonic Welding Machine Operator	5630	155	\$23.27

- 1. The average wages and demand for the listed occupations are estimates and will vary by industry, geography, and a candidates skills and experience.
- 2. The occupations listed are not intended to be all inclusive but are meant to represent a sampling of the fields that the short term training programs would prepare an individual to enter. Individual employers may require, at their discretion, additional training, experience or skills as a requirement for employment.
- 3. Median hourly wage represents the rate of pay per hour at which half of those working in the profession made more than the amount noted and half made less in calendar year 2005. It is not the average pay per hour.

For information on admittance or career counseling, please contact the community college's Admissions Office or Student Services Office.